

3.0 SAVANNAH RIVER SITE SPECIFIC END STATE VISION DESCRIPTION

3.1 Physical and Surface Interface

See Appendix A for Figures /Maps that support this Savannah River Site Specific End State Vision Description.

3.1.1 Administrative

The U. S. Government established the Savannah River Site in 1951 for the production and processing of nuclear materials for national defense requirements. The Department of Energy (DOE) manages SRS as a controlled area with limited public access. Located in south central South Carolina, SRS occupies an area of approximately 310 square miles (approximately 800 square kilometers). The Savannah River forms the site's southwestern boundary for 27 miles on the South Carolina-Georgia border. The site includes portions of Allendale, Aiken, and Barnwell Counties. (See Map 3.1.a., *Site Physical and Surface Interface – Current State* in Appendix A.)

SRS is located approximately midway between South Carolina's piedmont mountains and the Atlantic Ocean. The area is often referred to as the "Sand Hills." Topographic relief at SRS ranges from the long, narrow, steep areas on slopes on the east side of Upper Three Runs Creek and Tinker Creek to the nearly level areas on stream terraces west of SC Highway 125. Elevation ranges from about 420 feet above sea level near the Aiken security gate (northern part of the site) to 70 feet where the Lower Three Runs Creek enters the Savannah River (southeastern part of the site). Most of the drainage from SRS is into the Savannah River; a small portion of the site drains to the Salkehatchie River.

SRS is located on the Atlantic Coastal Plain. The site is covered by hardwood and pine forests and

contains lakes, streams, Carolina bays, and other wetlands. The sediments are stratified sand, clay, limestone, and gravel that dip gently seaward. Some soils in the upland area and along the major streams are well-drained to excessively drained. Soils on bottom land range from well-drained to very poorly drained.

The entire site is designated as a National Environmental Research Park (NERP) used by ecology, forestry, and archaeology groups. Scientific investigators from universities, colleges, and other research organizations use SRS as an outdoor laboratory for the study of the impact of man's activities on the environment.

The original facility layout of SRS was designed to isolate major radioactive operations near the center of the site. This design created a buffer zone that reduces the risk of accidental exposure to the general public and provides security for the site.

- Administrative Facilities

The administrative facilities provide office space, general training, and records storage for SRS personnel to conduct normal business operations in support of the site's missions.

A Area and B Area are the primary administrative areas. Administrative facilities are also located in each process area to provide office space for personnel who support the area's specific functions.

Specific details for each site facility area are discussed in Chapter 4, *Hazard Specific Discussion*.

- Non-nuclear Facilities

Non-nuclear facilities include Central Shops (N Area), Heavy Water (D Area), and the Savannah

River National Laboratory (SRNL), formerly the Savannah River Technology Center (SRTC). Central Shops houses construction and craft facilities, such as fabrication and welding shops and associated materials in support of construction services. This area houses the primary warehouse facilities: storage facilities for operations and maintenance materials, including supplies and spare parts.

The Heavy Water facilities in D Area were actually “dual use” because these facilities had significant nuclear and non-nuclear operations. D-Area contained facilities for supporting heavy water coolant/moderator to the reactors. Heavy water purification facilities, an analytical laboratory, and a powerhouse were operating in the area. This area is essentially closed now.

SRNL conducts research, development, and technical support activities. Laboratory operations are conducted in A Area and formerly in TNX, which is under closure. SRNL also has nuclear facilities within A Area.

- Nuclear/Radiological Facilities

Nuclear/radiological facilities at SRS include the following:

Fuel/Target Fabrication (300 Area) – Formerly metallurgical/foundry facilities for fabricating fuel and target elements for SRS reactors are located in the 300 Area (M Area). Currently this area is undergoing closure activities.

Nuclear Production Reactors (100 Area) – Five reactors for nuclear production originally were built at SRS. All five reactors – C, K, L, P, and R – are classified as surplus facilities and are being evaluated for deactivation and decommissioning. Fuel storage basins in L Reactor contain spent nuclear fuel, awaiting disposition.

Nuclear Materials Processing Facilities (200 Area) – The processing, stabilization, separation,

and recovery of nuclear materials are currently only being performed in H-Area facilities. F-Area facilities formerly performed this work, but most of F-Area is undergoing closure activities. Both F and H Areas have a large, shielded canyon building for processing irradiated materials, glovebox facilities for product finishing, and associated support facilities. In addition, F Area contains an analytical laboratory, the Plutonium Metallurgical Building, and the Naval Fuel Facility. The facilities are also in the closure process. H Area contains the Receiving Basin for Offsite Fuels, which is also in the closure mode.

Tritium Facilities – Located in H Area, the tritium recycling facilities will continue at SRS and include recycling weapon components for the active stockpile and extraction of tritium from remaining irradiated targets.

Waste Management Facilities – High level waste (HLW) tanks are located in F and H Areas. In S Area, the Defense Waste Processing Facility immobilizes the high activity portion of HLW in glass. The Saltstone Facility (in Z Area) and Effluent Treatment Project are also located in H Area.

Solid Waste Disposal Facility – Solid waste is centrally located in a 195-acre complex in G and E Areas. These facilities store and dispose of radioactive solid wastes and include the Low Level Radioactive Waste Disposal Facility, Transuranic Waste Storage Pads, and the Mixed Waste Storage Buildings.

3.1.2 Watersheds

There are five main watersheds that originate on, or pass through the Savannah River Site (SRS) before discharging into the Savannah River/Floodplain Swamp. These include the following:

- Upper Three Runs Watershed
- Fourmile Branch Watershed
- Pen Branch Watershed

- Steel Creek Watershed
- Lower Three Runs Watershed

All of these watersheds, including the portion of the Savannah River adjacent to SRS, and the stream/wetlands associated with the Integrator Operable Units (IOUs), integrate the potential contamination discharged to surface water or groundwater from SRS operations. The IOUs are the primary pathways for offsite transport of site related contamination.

Additional information for each watershed and associated IOU can be found in Chapter 4, *Hazard Specific Discussion*.

3.1.3 Surface Water

Five major surface water streams feed into the Savannah River: Upper Three Runs Creek, Four Mile Creek (also known as Fourmile Branch), Pen Branch, Steel Creek, and Lower Three Runs Creek.

There are two major artificial bodies of water onsite: Par Pond and L Lake. Par Pond was created in 1958 by the construction of an earthen dam on the Lower Three Runs Creek to provide cooling water for and receive water from the P and R Reactors. The pond covers 2,640 acres and has an average depth of 20 feet.

L Lake, which covers 1,000 acres, was created in 1985 by an earthen dam across Steel Creek to receive cooling water discharges from L Reactor. Water from L-Lake flows to Steel Creek and eventually the Savannah River. Neither Par Pond nor L-Lake is actively used as all SRS reactors are permanently shutdown.

There are also approximately 200 Carolina bays, which are naturally occurring pond formations found in parts of the Southeast United States, are scattered throughout the site, covering a total area of approximately 1,100 acres. These bays serve as natural habitats for many species of wildlife on the site.

3.1.4 Transportation and Infrastructure

- Transportation

SRS's transportation network consists of approximately 130 miles of primary, 1100 miles of secondary roads, and 33 miles of railroad. The roadways serve to provide access for 20,000 vehicle trips per day (employees driving to and from work and employees driving between site areas), shipment of radioactive and hazardous materials between areas, access to test wells, utility lines, research sites, and natural resource management activities. Westinghouse Savannah River Company (WSRC) maintains primary roads and the USDA United States Forest Service - Savannah River (USFS-SR) maintains the secondary roadways.

The railroads support delivery of foreign fuel shipments, movement of nuclear material and equipment onsite, and will support delivery of construction materials for new mission projects. Materials and products transported by rail to or from SRS are shipped by CSX Transportation, which has access throughout the United States, Canada, and Mexico. No tunnels or underpasses restrict the transportation of tall or wide loads.

Both roads and railroads are undergoing evaluation to reduce costs. For example, railroad operation shifts will be reduced from two to one, and WSRC will continue to close unneeded track sections, reduce railroad tie replacements, transfer railroad shipments to road shipments, etc., with plans to abandon SRS railroad system after the last shipment of depleted uranium oxide waste drums to Envirocare, Utah (by Fiscal year [FY] 2006).

- Dams

There are 12 SRS dams, all of which are on the Federal Energy Regulatory Commission (FERC) Dam Inventory list. Two dams (PAR Pond and Steel Creek) are classified as high hazard dams

while the other 10 (Pond A, Pond B, Pond C, Pond 2, Pond 4, Pond 5, Skin Face, Old Fire Pond, New Fire Pond and A01 Dam) are low hazard. All ponds are subject to annual inspections by FERC. The function of SRS dams will continue indefinitely to contain radioactive sediments and to support biological, environmental, and ecological research.

- Steam

The SRS Steam System provides process steam to SRS buildings and facilities in support of the site's missions and in compliance with appropriate regulations and standards. Steam is generated and distributed from facilities in A, D and K Areas with a facility in H Area now in standby condition. The D-Area steam generation is run by the South Carolina Electric and Gas Company (SCE&G). The total design capacity of all steam generating facilities is almost 15 million lbs/yr.

- Domestic Water

The Domestic Water System produces and distributes all domestic water to the SRS population in compliance with state and federal regulations. Water quality is governed by the Secondary Water Quality Standards. Included in domestic water systems is the production and distribution of bottled water.

Domestic water is drawn from 20-inch diameter production wells using vertical turbine pumps that are installed in the aquifer approximately 700 feet below grade. Most of the domestic water produced is used directly by the SRS workforce population; however, some domestic water is used for equipment cooling, fire protection water, and as make up water to cooling towers.

Before 1997, each SRS area had individual domestic water systems, totaling 28 independent systems. To implement the new regulatory requirements of the Safe Drinking Water Act,

many of the individual systems were consolidated. Now the site has 18 domestic water systems, including three large systems that supply 98% of the site's domestic water requirements. The three large systems have water treatment facilities located in A, B, and K Areas. The B-Area treatment facility is a standby for the A-Area facility. Well water is treated in the large treatment facilities with either soda ash or caustic to adjust the pH, phosphate to reduce corrosion, and sodium hypochlorite as a disinfectant.

The domestic water distribution systems have approximately 32 miles of intra-area distribution piping and 26 miles of inter-area distribution piping with five elevated storage tanks.

- Firewater System

The Firewater System provides reliable firewater supply and distribution systems within all the operating areas in support of safety, facility operations and loss prevention at the SRS in compliance with appropriate codes and standards. Within the SRS Firewater System are 16 water supply and distribution systems, which in turn supply 245 water-based fire suppression systems as well as approximately 1,500 fire hydrants, valves and curb boxes used by the SRS Fire Department for manual fire fighting.

Sixteen fire protection water supply and underground distribution systems support the operating areas of SRS. A reliable fire protection water supply is crucial to ensure life safety. In addition, these systems ensure against vital program interruption, safety class equipment (and containment provisions) damage, property and monetary losses and release of radiological or other hazardous material from fire.

A few of the fire protection water supply and distribution systems have been in service since the early 1950s. The other systems have been installed and/or modified within the last 10 years. Piping materials range from unlined cast

iron in the 1950s, to concrete-lined cast and ductile iron, to PVC pipe in current installations. Pumping systems have improved from manually operated steam turbines to electric and diesel driven fire pumps in dedicated pump house facilities.

- Process/River Water System

The mission of the Process/River Water System is to produce and provide process water to facilities throughout the SRS in support of facility operations and site missions. This support is required to be reliable, in compliance with applicable regulations, and cost effective. The current average demand for process water is 2,400 gallons per minute (gpm) with an additional 285,000 gallons of deionized water produced each month in direct support of SRS missions. The river water system now supplies 5,000 gpm of river water primarily to L Lake and also to K Area, L Area and Par Pond as required.

The SRS Process Water Systems have been in operation across the site for over 45 years. Components of these systems include process water wells, process water distribution systems, deionized water systems, chemical treatment facilities and the river water system. With minor exceptions, the basic configuration of the process water systems has remained unchanged since their original installation. Process water is used to provide water for once-through cooling, as a supply of make-up water for cooling tower water systems, as a feed to deionizers, which supply deionized water (water treated to remove both anions and cations) to boilers and other applications as a water supply for fire water storage tanks and for flushing and wash-down.

The river water system was installed in the early 1950s to provide cooling water to the five SRS production reactors. The system consisted of, basically, a distribution system of 50 miles of large, 46-inch to 84-inch diameter pipe and three pump stations each with ten 25,000 gpm pumps.

With reactor cooling water no longer required, two pump stations have been retired with the third now providing water to, mostly, maintain the level of L Lake and, in times of drought, Par Pond. Reduced requirements and funding limits have caused system maintenance to be sharply reduced. The system itself, however, remains functional as determined by a comprehensive review performed in 1996.

- Sanitary Wastewater System

The Sanitary Wastewater Systems provide for the collection, treatment, and discharge of sanitary wastewater effluent within South Carolina Department of Health and Environmental Control (SCDHEC) and National Pollutant Discharge Elimination System (NPDES) outfall limits for the SRS population. These systems include a central treatment facility capable of handling over 1 million gallons of sanitary wastewater each day, five smaller treatment plants, 58 miles of sewer pipe and 44 lift stations.

Ninety six percent (96%) of the SRS sanitary wastewater is treated at the Central Sanitary Wastewater Treatment Facility (CSWTF). The CSWTF is located on Burma Road and was installed in 1994-95. The original design capacity of approximately 1,050,000 gallons per day (gpd) was for a much larger site population of approximately 30,000 employees. The current CSWTF average flow rate is approximately 18% of design capacity. This flow rate reduced organic loading has presented a few operational issues. The facility receives sanitary wastewater transported through an inter-area collection system.

The inter-area collection system was also installed in 1994-95 and consists of 18 miles of mostly pressure sewer line and 12 additional lift stations necessary to transport the sanitary wastewater to the CSWTF. This system collects the sanitary wastewater from the A, B, C, E, F, H, M, N and S Areas of SRS. The remaining 4%

of the SRS sanitary wastewater is generated and treated at smaller, independent, treatment facilities located in the remote areas of D, TNX, L, K and P Areas.

Many of the intra-area sanitary wastewater collection systems were installed when SRS was constructed in the early 1950s and includes about 40 miles of mostly gravity sewer pipe.

- Electrical Distribution System

The Electrical Distribution System in each area provides a reliable source of electrical power to all SRS processes and facilities in compliance with appropriate regulations and standards. The major equipment associated with the electrical distribution systems includes switchgear, transformers, reclosers, overhead lines and underground cables. There are approximately 114 miles of overhead line (including 3000 poles, 299 pole mounted transformers and associated hardware), 18 miles of underground cable, four automatic reclosers, and 369 pad transformers (includes switchgear and associated hardware).

SRS electrical power is supplied, under contract, from the South Carolina Electric & Gas (SCE&G) 115 kilovolts (kV) Transmission System. The contract specifies demand levels, energy rates and operating protocol for electrical power supplied to SRS. The 115 kV power supply is transformed to a medium voltage level, typically 13.8 kV and then distributed to the site distribution systems by WSRC. The transmission and distribution systems at SRS provide a reliable source of power to all processes and facilities on the site. Electrical power for SRS is provided from three high voltage lines:

- South Carolina Electric & Gas - 1 with a capacity of 160 megawatts
- South Carolina Electric & Gas - 2 with a capacity of 160 megawatts
- South Carolina Electric & Gas - 3 with a capacity of 336 megawatts

The electrical power is transmitted throughout the site at 115,000 volts (115 kV). The 115 kV transmission system consists of wooden poles, phase conductors, static wires, insulators, pole line hardware, switching stations, and substations. The 115 kV transmission system substations and lines are arranged in interconnecting loops, which provides SRS process areas and facilities with redundant sources of power.

- Emergency Services

The site has a comprehensive emergency management program that covers all phases of emergency planning, mitigation, preparedness, response, and recovery. The level of support to any area, facility, or division is driven by the hazards involved and by the impact to the worker, the general site population, the offsite population, and the environment.

SRS maintains a fully manned, equipped, trained and qualified fire department capable of responding to fires, medical emergencies, hazardous material emergencies, and rescue situations. Three stations are located on site. Fire Protection Systems are established, implemented and maintained throughout the site facilities in support of life safety, loss prevention and continued facility operations. In order to effectively support existing and future site missions, these systems must be maintained in an operable, reliable and code compliant condition.

SRS also has a round-the-clock Emergency Operations Center (EOC) and Savannah River Site Operations Center (SRSOC). The EOC is a dedicated emergency response facility. The SRSOC is a continuously staffed 911 facility, which also houses the Fire Alarm Computer System.

- Endangered Species

The site is currently restoring native vegetative communities and species, including red-cockaded woodpecker habitat, hardwood habitat, pine-savannahs, and wetlands. In addition, this restoration will protect water quality by stabilizing soil and minimizing industrial area runoff through engineering and vegetative management techniques. Carolina bays and the site's dominant natural vegetation, longleaf pine savannahs, are being restored and restoration is proceeding where it's compatible with ambient soil conditions. Prescribed burning operations continue to enhance wildlife habitat, facilitate post timber harvest regeneration, and reduce forest fuels. Soil and watershed maintenance and stabilization provide infrastructure support to the SRS industrial areas. Natural resource research projects cover a wide range of topical areas, including short rotation woody crops; biodiversity; prescribed fire and smoke management; wetland, pine savannah, and hardwood restoration; and endangered species recovery.

In June 1999, DOE designated 10,000 acres of the Savannah River Site as a biological and wildlife refuge, creating the Crackerneck Wildlife Management Area and Ecological Preserve. The South Carolina Department of Natural Resources manages the reserve (under a long-term lease) and associated deer hunts and maintains the site's wild turkey populations.

SRS provides habitat for four federal endangered species, the red-cockaded woodpecker, wood stork, shortnose sturgeon, and smooth purple coneflower, and two federal threatened species, the bald eagle and American alligator. Planning for habitats for these species is important because available current and future land use in the immediate vicinity of federally threatened or endangered species is limited.

Other site species require consideration because the protection and management philosophy for

the DOE Research Set-Aside Areas states that they are for research; should receive as little management as possible; should be protected to remain as natural as possible with little or no human influence; and are primarily for non-manipulative research. These areas also function as "control areas" in evaluating the effects of SRS operations and forest management activities. The largest of these areas is the E. P. Odom Wetland Set-Aside, which includes the northern section of the Upper Three Runs Creek watershed and is specifically protected by the SRS Stream Management Policy.

The Research Set-Aside Areas total 14,005 acres, about seven percent of the site. These areas are excluded from most routine maintenance and forest management activities. The Research Set-Aside Areas were selected to represent most of the site's major habitat types and include old fields, sand hills, upland hardwoods, mixed pine/hardwoods, bottomland forests, swamp forests, Carolina bays, and fresh water streams and impoundments.

3.1.5 Surface Contamination

SRS has identified 515 inactive waste units and 1013 facilities for deactivation and decommissioning. In addition, many of the streams and creeks have some contamination due to run off from production facilities or the use of surface water for cooling water. Additional details can be found in Chapter 4, *Hazard Specific Discussion*.

3.1.6 Differences Between Current State, Performance Management Plan (PMP) End State Plan, and Vision End State

While it is anticipated that some of the infrastructure will not be needed in the future, some level of infrastructure will be needed after the Vision End State. For example, railroads will be phased out as end states are reached, but some roads will be necessary for remaining site

employees for continuing National Nuclear Security Administration (NNSA) missions, for potential new missions and for monitoring and long-term stewardship. For NNSA missions and potential new missions for SRS, water, electricity, and other utilities will still be needed in certain areas. In addition, the dams will need to be maintained indefinitely to contain radioactive sediments and to support biological, environmental and ecological research. The need for emergency services, including the site's fire department and the Emergency Operations Center will remain; however, these may be at a reduced level by 2025.

3.2 Human and Ecological Land Use

3.2.1 Land Uses

Except for site facilities, SRS land cover is a wide variety of natural vegetation types with more than 90 percent in forest land. Open fields and pine and hardwood forests comprise 73 percent of the site; approximately 22 percent is wetlands, streams, and two lakes; and production and support areas, roads, and utility corridors account for the five percent of the total land area. SRS includes several production, production support, service, research and development, and waste management area. (See Map 3.2.a., *Site Human and Ecological Land Use – Current State* in Appendix A.)

3.2.2 Differences Between Current State, PMP End State Plan, and Vision End State

SRS land has been and will continue to remain under federal ownership. Land cover will remain as a wide variety of natural vegetation types with more than 90 percent in forest land. In addition, the 22 percent of the site that is wetlands, streams and two lakes will continue through the *End State Vision* end date. The PMP planned that 72 facilities would have been deactivated and decommissioned by 2006, and

515 inactive waste units remediated by 2026. The *End State Vision* plans for 1,013 facilities to be deactivated and/or decommissioned unless reused to support other long-range federal missions at SRS or designated for historical preservation or economic development, and all 515 inactive waste units remediated. Many of these facilities and inactive waste units will remain in situ, leaving the percentages for natural vegetation; wetlands, streams and lakes; and production and support facilities to be similar to current state. For example, reactor buildings, canyon facilities, and high-level waste tanks will be deactivated and decommissioned in situ. Since these types of facilities are the largest facilities on the site, the percentage for production and support facilities will remain the same.

Protection of federally endangered species and wildlife habitats will continue beyond 2025. Ecological research will also continue.

3.3 SRS Legal Ownership

3.3.1 Site Ownership – Current and 2025 End State

The site is owned by DOE and operated by an integrated team led by WSRC. (See Map 3.3.a., *Site Legal Ownership – Current State* in Appendix A.) The *End State Vision* plans for continued federal ownership of the land, most likely the Department of Energy. Currently, there are NNSA missions that may extend beyond the 2025 window. This follows the recommendation of the Citizens Advisory Board Recommendation Number 8 made in 1995 and previous land use plans. The land was formerly owned by individual farmers and landowners, and there has not been any industrial/manufacturing interest in private ownership of the land because the site is located in a remote, rural area.

In addition, federal law requires that any excess land and/or facilities must be turned over the

Bureau of Land Management. This Bureau looks for other federal agencies that might have a use for the land, and then any state agency or municipality before it could be considered for sale to the public. However, to do so, the land and facilities would need to be remediated to residential standards.

3.3.2 Surrounding Site Ownership

As discussed in Chapter 2, the land use surrounding SRS primarily includes residential, light industry, heavy industry, and recreation. Land surrounding the site is owned by both private individuals and companies. In 2025, it is expected that the land use and ownership will be similar to current land use and ownership.

3.4 SRS Demographics

Major SRS employers include the following: (The number of employees shown is as of November 15, 2004.) (See Map 3.4.a., *Site Demographics – Current State* in Appendix A.)

Department of Energy –Savannah River (DOE-SR), which provides management and oversight for non-National Nuclear Security Administration activities. There are approximately 378 DOE-SR employees at SRS.

Department of Energy – National Nuclear Security Administration, which provides management and oversight for NNSA activities. There are approximately 32 DOE-NNSA employees at SRS.

Westinghouse Savannah River Company, with Bechtel Savannah River Company, British Nuclear Fuel Limited, BWXT, CH2M Hill, and Polestar, which manages and operates SRS for DOE and NNSA. WSRC and its partners have approximately 10,953 employees at SRS.

Wackenhut Services, Inc. (WSI), which provides and manages the site security force. WSI employs approximately 877 employees at SRS.

Savannah River Ecology Laboratory (SREL) which provides site ecological evaluations and research. The University of Georgia, which manages SREL, employs approximately 183 employees.

USDA United States Forest Service - Savannah River (USFS-SR), an independent unit of the United State Forest Service, which manages the site's natural resources. There are approximately 173 SRFS employees at SRS.

Other employers include the University of South Carolina Institute of Archaeology and Anthropology, the U. S. Department of Agriculture's Soil Conservation Service, and the South Carolina Fish and Wildlife Service.

The number of employees will change considerably over the next 20 years as end states are reached. WSRC may or may not be the management and operating contractor, in fact, a new contract format may be in operation at the time. The WSI contract will also be available for renewal or rebid during the timeframe of this Vision. While the need for security for DOE-SR missions will decrease over time as end states are reached, there will be a need for additional security for the Mixed Oxide (MOX) facilities for the disposition of excess DOE Complex plutonium and if new missions are assigned to SRS. It is anticipated that SREL and SRFS will maintain their presence at SRS and will continue the same missions that they current have.

3.4.1 Surrounding Site Demographics Differences Between Current and 2025 End State

A careful examination of economic development plans for the region indicates normal growth expected in metropolitan counties in the region. There are no major changes to the demographics surrounding the site anticipated by 2025.

3.5 Selection of Sites for Future Missions

As part of the evaluation process for new missions and facilities, potential sites must be identified and characterized to determine their suitability. This screening process allows site management to determine if SRS has suitable sites for new projects, based on anticipated requirements and criteria, such as available

space, infrastructure, support services, geological conditions, etc. Also this information provides preliminary guidance to site managers and planners for input into the National Environmental Policy Act (NEPA) process. (See Map 3.5.a., *Current Locations without Restrictions* and Map 3.6.a., *Future Development – Suitable for Industrial Missions* in Appendix A.)